

## **AI ASSISTED CODING LAB**

### **ASSIGNMENT-14.4**

Name: Guangsinlung Phaomei

Enroll no: 2503A51L20

Batch no: 19

#### TASK DESCRIPTION 1:

##### **AI-Assisted Portfolio Website**

###### **Scenario:**

A student wants to showcase their projects, skills, and contact details in a portfolio website. Instead of writing all code manually, they want to speed up the process using GitHub Copilot.

- Use Copilot to generate an **HTML structure** for a personal portfolio page (sections: Home, About, Projects, Contact).
- Ask Copilot to suggest **responsive CSS styling** for the layout (e.g., grid/flexbox).
- Customize Copilot's suggestions to add a **hover effect** on project cards.

###### PROMPT :

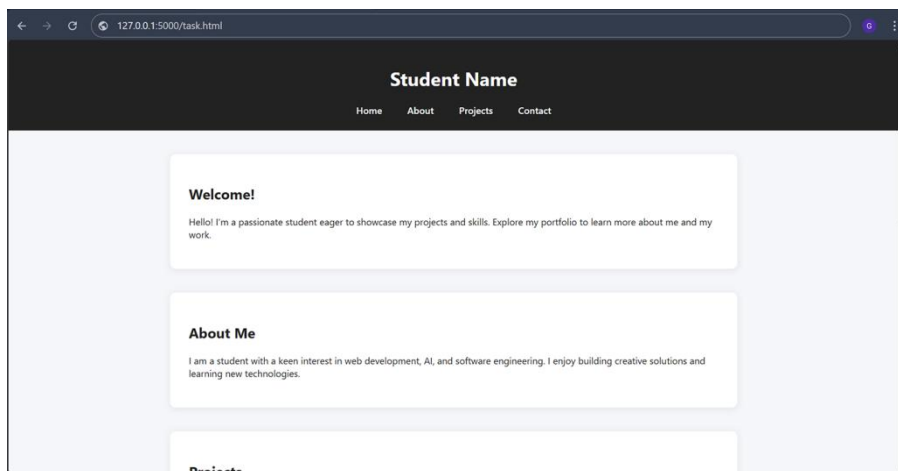
Create a responsive student portfolio website using HTML and CSS. The website should have sections: Home, About, Projects, and Contact.

###### CODE GENERATED :

```
Go Run Terminal Help AASIGNMENT-14.4
Task1.html X task2.html task3.html task4.html
Task1.html > html > head > style > header
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Student Portfolio</title>
7   <style>
8     body {
9       margin: 0;
10      font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
11      background: #f5f6fa;
12      color: #222;
13    }
14    header {
15      background: #222;
16      color: #fff;
17      padding: 1.5rem 0;
18      text-align: center;
19    }
20    nav {
21      margin-top: 1rem;
22    }
23    nav a {
24      color: #fff;
25      margin: 0 1.2rem;
26      text-decoration: none;
27      font-weight: 500;
28      transition: color 0.2s;
29    }
30    nav a:hover {
31      color: #00aaff;
32    }
33    section {
34      max-width: 900px;
35      margin: 2.5rem auto;
36      padding: 2rem;
37      background: #fff;
```

```
Go Run Terminal Help AASIGNMENT-14.4
Task1.html X task2.html task3.html task4.html
Task1.html > html > head > style > header
2 <html lang="en">
100 <body>
121 </section>
122
123 <section id="projects">
124   <h2>Projects</h2>
125   <div class="projects-grid">
126     <div class="project-card">
127       <h3>Project One</h3>
128       <p>A web app that helps users track their daily habits and progress.</p>
129     </div>
130     <div class="project-card">
131       <h3>Project Two</h3>
132       <p>An AI chatbot that assists students with coding questions.</p>
133     </div>
134     <div class="project-card">
135       <h3>Project Three</h3>
136       <p>A portfolio website built using HTML, CSS, and JavaScript.</p>
137     </div>
138   </div>
139 </section>
140
141 <section id="contact">
142   <h2>Contact</h2>
143   <form class="contact-form">
144     <label for="name">Name</label>
145     <input type="text" id="name" required>
146     <label for="email">Email</label>
147     <input type="email" id="email" required>
148     <label for="message">Message</label>
149     <textarea id="message" rows="4" required></textarea>
150     <button type="submit">Send</button>
151   </form>
152 </section>
153 </body>
154 </html>
```

OUTPUT :



#### OBSERVATION :

The portfolio website was developed using HTML and CSS to create a clean, responsive, and user-friendly design. The structure includes a header with navigation links and four main sections: Home, About, Projects, and Contact. The Projects section showcases work using styled cards with hover effects, while the Contact section provides a functional form for user interaction. Media queries are applied to ensure the site adapts well to different screen sizes, including mobile devices. Overall, the assignment demonstrates the application of web development concepts such as semantic HTML, CSS styling, responsiveness, and interactivity.

#### TASK DESCRIPTION 2 :

##### **AI-Generated Restaurant Landing Page**

##### **Scenario:**

A local restaurant needs a simple landing page with a navigation bar, menu highlights, and an image gallery. The developer wants to quickly generate it using AI assistance.

- Use Copilot to create a **navigation bar with links** (Home, Menu, Gallery, Contact).
- Generate a **menu section** styled with CSS cards.
- Add a **JavaScript-based image slider** for the gallery, with Copilot suggesting the base code.

##### **PROMPT :**

Create a responsive and visually appealing single-page website for a local restaurant called

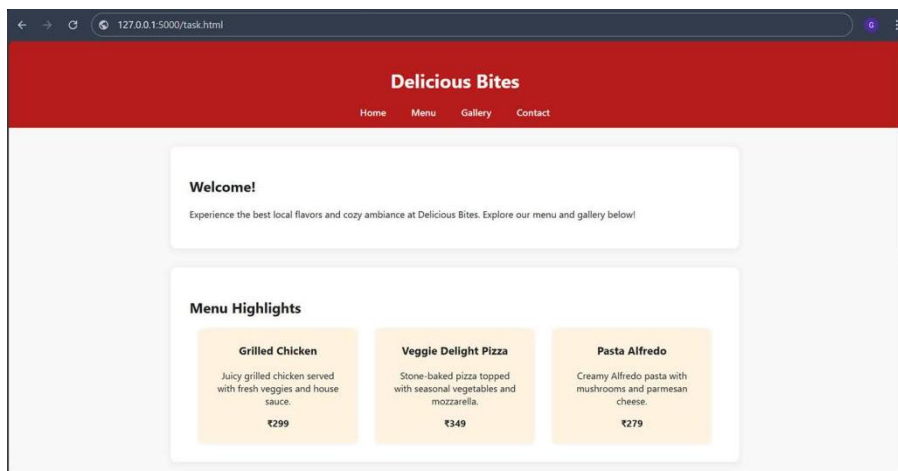
"Delicious Bites."

CODE GENERATED :

```
Go Run Terminal Help AASIGNMENT-14.4
Task1.html task2.html X task3.html task4.html
task2.html > html > head > style > nav
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Local Restaurant</title>
7   <style>
8     body {
9       margin: 0;
10      font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
11      background: #f8f8f8;
12      color: #222;
13    }
14    header {
15      background: #b71c1c;
16      color: #fff;
17      padding: 1.5rem 0 1rem 0;
18      text-align: center;
19    }
20    nav {
21      margin-top: 1rem;
22    }
23    nav a {
24      color: #fff;
25      margin: 0 1.2rem;
26      text-decoration: none;
27      font-weight: 500;
28      transition: color 0.2s;
29    }
30    nav a:hover {
31      color: #ffd600;
32    }
33    section {
34      max-width: 900px;
35      margin: 2rem auto;
36      padding: 2rem;
37      background: #fff;
```

```
Go Run Terminal Help AASIGNMENT-14.4
Task1.html task2.html X task3.html task4.html
task2.html > html > head > style > nav
2 <html lang="en">
116 <body>
153 <section id="gallery">
161 </div>
162 </section>
163
164 <section id="contact">
165   <h2>Contact</h2>
166   <p>Call us: <strong>+91-9876543210</strong></p>
167   <p>Email: <strong>info@deliciousbites.com</strong></p>
168   <p>Visit: 123 Main Street, Your City</p>
169 </section>
170
171 <script>
172   // Simple JS image slider
173   const images = document.querySelectorAll('.gallery-slider img');
174   let current = 0;
175
176   function showSlide(idx) {
177     images.forEach((img, i) => {
178       img.classList.toggle('active', i === idx);
179     });
180   }
181
182   function prevSlide() {
183     current = (current - 1 + images.length) % images.length;
184     showSlide(current);
185   }
186
187   function nextSlide() {
188     current = (current + 1) % images.length;
189     showSlide(current);
190   }
191 </script>
192 </body>
193 </html>
```

OUTPUT :



### OBSERVATION :

This restaurant website code creates a clean, responsive single-page layout for “Delicious Bites,” featuring a warm color scheme and smooth user experience. It includes a header with navigation links, a welcome section, a menu display with interactive cards for three dishes, a gallery slider showcasing food images with left/right buttons, and a contact section listing phone, email, and address. The design adapts well to mobile screens using media queries, and the image slider is powered by simple JavaScript. Overall, the code is well-structured, visually appealing, and easy to maintain—ideal for showcasing a local restaurant online.

### TASK DESCRIPTION 3 :

#### AI-Powered Event Registration Form

##### Scenario:

SR University is hosting a tech fest. They need a web-based registration form for students. The form must validate user input in real-time.

- Ask Copilot to generate an **HTML form** (fields: Name, Email, Phone, Department, Event Selection).
- Use Copilot to assist in adding **CSS styling** for an attractive form layout.
- Implement **JavaScript validation** (e.g., email format check, phone number length check) using Copilot’s suggestions.

### PROMPT :

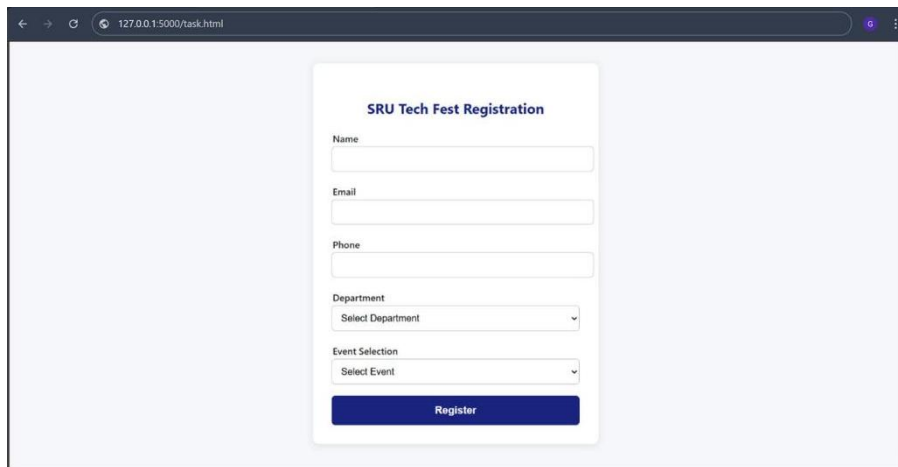
Create a tech fest registration form titled "SRU Tech Fest Registration" with fields for name, email, phone, department, and event.

CODE GENERATED :

```
Go Run Terminal Help < -> AASIGNMENT-14.4
task1.html task2.html task3.html X task4.html
task3.html > html > head > style > .container
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>SRU Tech Fest Registration</title>
7   <style>
8     body {
9       background: #f5f7fa;
10      font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
11      margin: 0;
12      color: #222;
13    }
14    .container {
15      max-width: 420px;
16      margin: 3rem auto;
17      background: #fff;
18      border-radius: 10px;
19      box-shadow: 0 2px 12px rgba(0,0,0,0.09);
20      padding: 2.5rem 2rem 2rem 2rem;
21    }
22    h2 {
23      text-align: center;
24      color: #1a237e;
25      margin-bottom: 1.5rem;
26    }
27    form label {
28      display: block;
29      margin: 0.7rem 0 0.2rem 0.1rem;
30      font-weight: 500;
31    }
32    form input, form select {
33      width: 100%;
34      padding: 0.7rem;
35      border: 1px solid #bdbdbd;
36      border-radius: 6px;
37      font-size: 1rem;
```

```
Go Run Terminal Help < -> AASIGNMENT-14.4
task1.html task2.html task3.html X task4.html
task3.html > html > head > style > .container
2 <html lang="en">
69 <body>
111 <script>
155   function validateDept() {
162   }
163
164   function validateEvent() {
165     if (eventSel.value === "") {
166       eventError.style.display = "block";
167       return false;
168     }
169     eventError.style.display = "none";
170     return true;
171   }
172
173   name.addEventListener('input', validateName);
174   email.addEventListener('input', validateEmail);
175   phone.addEventListener('input', validatePhone);
176   dept.addEventListener('change', validateDept);
177   eventSel.addEventListener('change', validateEvent);
178
179   regForm.addEventListener('submit', function(e) {
180     let valid = true;
181     if (!validateName()) valid = false;
182     if (!validateEmail()) valid = false;
183     if (!validatePhone()) valid = false;
184     if (!validateDept()) valid = false;
185     if (!validateEvent()) valid = false;
186     if (!valid) {
187       e.preventDefault();
188     } else {
189       alert("Registration Successfull");
190     }
191   });
192 </script>
193 </body>
194 </html>
```

OUTPUT :

A screenshot of a web browser displaying a registration form titled "SRU Tech Fest Registration". The form is centered on a light blue background. It contains input fields for Name, Email, and Phone, and dropdown menus for Department and Event Selection. A dark blue "Register" button is at the bottom. The browser's address bar shows "127.0.0.1:5000/task.html".

OBSERVATION :

The form is well-structured and user-friendly, with clearly labeled fields for name, email, phone number, department, and event selection. The design uses a clean layout with a centered container, soft background, and rounded corners, making it visually appealing. Real-time validation is handled smoothly with JavaScript, showing helpful error messages when inputs are missing or incorrect. Overall, the code is neat, responsive, and provides a smooth registration experience for users.

TASK DESCRIPTION 4 :

### AI-Assisted E-Commerce Product Page

#### Scenario:

A startup wants a basic **e-commerce product page** to display products with prices and an "Add to Cart" button.

- Use Copilot to generate a **grid-based product catalog** in HTML/CSS.
- Implement a **JavaScript "Add to Cart" functionality** with Copilot's guidance.
- Modify Copilot's suggestions to include a **cart counter** at the top-right corner of the page.

PROMPT :

This code builds a clean and responsive product page for "Startup Shop," displaying four tech items in a grid layout with images, descriptions, prices, and "Add to Cart" buttons.

## CODE GENERATED :

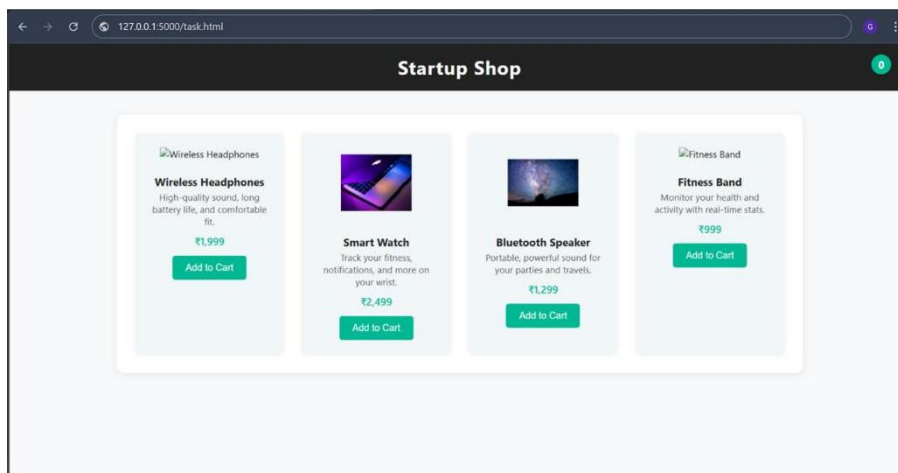
```
Go Run Terminal Help AASIGNMENT-14.4
task1.html task2.html task3.html task4.html
Search AASIGNMENT-14.4 — task4.html - AASIGNMENT-14.4 - Visual Studio Code

task4.html > html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Startup Shop - Products</title>
7   <style>
8     body {
9       margin: 0;
10      font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
11      background: #f7f9fa;
12      color: #222;
13    }
14    header {
15      background: #222;
16      color: #fff;
17      padding: 1.2rem 0.5rem;
18      position: relative;
19    }
20    .cart-counter {
21      position: absolute;
22      top: 1.2rem;
23      right: 2rem;
24      background: #00b894;
25      color: #fff;
26      border-radius: 50%;
27      width: 2.1rem;
28      height: 2.1rem;
29      display: flex;
30      align-items: center;
31      justify-content: center;
32      font-weight: bold;
33      font-size: 1.1rem;
34      box-shadow: 0 2px 8px rgba(0,0,0,0.08);
35    }
36    h1 {
37      margin: 0;
```

```
Go Run Terminal Help AASIGNMENT-14.4
task1.html task2.html task3.html task4.html X
task4.html > html
2 <html lang="en">
113 <body>
118   <section class="products-section">
119     <div class="product-grid">
127       <div class="product-card">
130         <p>Track your fitness, notifications, and more on your wrist.</p>
131         <span class="price">₹2,499</span>
132         <button class="add-cart-btn" onclick="addToCart()">Add to Cart</button>
133       </div>
134       <div class="product-card">
135         
136         <h3>Bluetooth Speaker</h3>
137         <p>Portable, powerful sound for your parties and travels.</p>
138         <span class="price">₹1,299</span>
139         <button class="add-cart-btn" onclick="addToCart()">Add to Cart</button>
140       </div>
141       <div class="product-card">
142         
143         <h3>Fitness Band</h3>
144         <p>Monitor your health and activity with real-time stats.</p>
145         <span class="price">₹999</span>
146         <button class="add-cart-btn" onclick="addToCart()">Add to Cart</button>
147       </div>
148     </div>
149   </section>
150   <script>
151     // Cart counter logic
152     let cartCount = 0;
153     const cartCounter = document.getElementById('cartCounter');
154     function addToCart() {
155       cartCount++;
156       cartCounter.textContent = cartCount;
157     }
158   </script>
159 </body>
160 </html>
```

## OUTPUT :





### OBSERVATION :

The layout is clean and responsive, showcasing four tech products in a grid format with images, descriptions, prices, and “Add to Cart” buttons. The cart counter in the header updates dynamically using JavaScript, providing instant feedback when items are added. Styling is modern and consistent, with hover effects and soft shadows that enhance user interaction. The use of media queries ensures the design adjusts well on smaller screens, making it mobile-friendly and user-centric.